

ROMAN, Tiberiu, conf.

Enlarged session of the Organization of the Mathematical
Science Society. Gaz mat fiz 69 no.11:436 N '64.

1. Institute of Petroleum, Gas, and Geology, Bucharest.

ROMAN, TIBERIU

Roman, Tiberiu. Le système des générateurs des groupes abstraits, correspondantes aux 32 classes cristallographiques. Rev. Univ. "C. I. Parhon" Politehn. Bucuresti. Ser. Sti. Nat. 4 (1955), no. 6-7, 9-21. (Romanian. Russian and French summaries)
Geometrische Diskussion der 32 kristallgraphischen Klassen mit Angabe ihrer sämtlichen Untergruppen. Ferner wird für jede Klasse ein System von erzeugenden Operationen angegeben. In einer Tabelle wird die Ok-

taedergruppe O_h mit ihren sämtlichen Untergruppen dargestellt. Die diesbezügliche Bemerkung des Verf., dass die entsprechende Darstellung des Ref. [Die Bewegungsgruppen der Kristallographie, Birkhäuser, Basel, 1947 S. 72: MR 8. 5621 unvollständig sei, beruht auf einer

Group

Matt

3

teilen; Die Klasse D ist dort besonders hervorgehoben.
eine bessere Uebersicht zu gewinnen.
J. J. Burckhardt (Zürich).

8m

ROMAN, V., dr.; GOLDSTEIN, P., ing.; SOLOMON, I., ing.; IORDANESCU,
Eugenia, ing.

Contributions to the study of dyeing immature cotton fibers.
Ind text Rum 15 no.12:673-676 D '64.

1. Institute for Textile Research, Bucharest.

ROMAN, V.

Despre fizica moderna si perspectivele utilizarii energiei atomice;
victoria materialismului dialectic in fizica moderna. Editura Tehnica, 1954.
133 p. (Colectia Societatii pentru Raspandirea Stiintei si Culturii, 86-88)
(Modern physics and prospects for utilization of atomic energy; the victory of
dialectical materialism in modern physics. illus., notes)

So. East European Accessions List Vol. 5, No. 9 September, 1956

ROMAN, V.; KUN, A.

Assistance of the USSR in achievements of the Rumanian textile industry and our prospects for the technical development. II. p. 367. INDUSTRIA TEXTILA. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Rominia si Ministerului Industriei Usoare) Bucaresti. Vol. 6, no. 11. Nov. 1955.

So. East European Accessions List Vol. 5, No. 9 September, 1956

ROMAN, V.

Assistance of the USSR in achievements of the Rumanian textile industry and our prospects for technical development, III p. 422

INDUSTRIA TEXTILA, Bucuresti, Vol 6, No. 12, Dec., 1955

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

ROMAN, V.

"Shrinkage of textiles during washing", p. 276, (INDUSTRIA TEXTILA,
Vol. 5, No. 8, Aug. 1954, Bucuresti, Romania)

SO: Monthly List of East European Accessions, (DEAL, 10, Vol. 4,
No. 4, Aug. 1954, Uncl.

Review, V.

1. 1977.

2. 1977, V. 1, p. 1, an important factor for improvement of the appearance and
durability of leather. 1977.

3. 1977, V. 1, p. 1, 1977.

4. 1977, V. 1, p. 1, 1977.

5. 1977, V. 1, p. 1, 1977.

6. 1977, V. 1, p. 1, 1977.

7. 1977, V. 1, p. 1, 1977, May 1977.

RUMANIA/Chemical Technology. Chemical Products
and Their Applications. Dyeing and Chem-
ical Treatment of Textile Materials.

H

Abs Jour : Ref Zhur-Khimiya, No 6, 1959, 21895

Author : Roman, V., Vegh, St., Musca, M., Kovacs, A.,
Capota, Ch.

Inst : -

Title : Continuous Bleaching of Cotton Fabrics.

Orig Pub : II-a Consf. tehn.-stiint. a ind. usoare.
Textile [Bucuresti], ASIT, 1957, 268-277

Abstract : A continuous method for bleaching cotton
fabrics was developed by the authors. The
process consists of the following opera-
tions: impregnating of the material with
an alkaline solution, steaming, washing

Card : 1/3

RUMANIA/Chemical Technology. Chemical Products
and Their Applications. Dyeing and Che-
mical Treatment of Textile Materials.

H

Abs Jour : Ref Zhur-Khimiya, No 6, 1959, 21895

with hot and cold water, treatment with
a NaOCl solution (for 20-30 minutes at
pH 10 and temperature 200), washing with
cold water, treatment with an alkali so-
lution, washing with hot and cold water,
NaOCl bleaching, washing with cold water,
bleaching with H_2SO_4 , and washing with cold
water. Long use in industry of a bleaching
setup which works by this method showed good
results according to indicators of the qua-
lity of bleaching of fabrics, mechanical sta-
bility, average degree of polymerization of
cellulose, and its hydrophylic nature. Advan-

Card : 2/3

H-161

ROMAN, V., dr.

being used by the coacervation method. Ind text Rum 12 no.9:
375-376 S'61.

WILK, V. and CALOTA, G.

"Recovery of solutions after mordantization and their utilization in bleaching.", p. 19,
(TEXTILE, Vol. 2, no. 6, June 1981, Bucuresti)

SO: Monthly List of East European Accession, Vol. 2, no. 8, Library of Congress,
August 1953, Uncl.

IVAN, I.M.; SOLOMON, I.; TELNICEANU, A.; GHELASE, Maria; ROMAN, V.

Dynamics of antipoliomyelitic sero-neutralizing antibodies in children vaccinated with attenuated live virus vaccine. Stud. cercet. inframicrobiol. 12 no.4:467-473 '61.

1. Comunicare prezentata la Institutul de inframicrobiologie al Academiei R.P.R. ~~la sesiunea de studii~~
(POLIOMYELITIS immunology)

ROMAN, V. A.

191T106

USSR/Medicine - Virus Diseases

Mar 51

"Primary Myelitis," V. A. Roman

"Nevropatol i Psikhiat" Vol XX, No 3, p 89

Short summary on author's lecture at 1949 Session of Rostov Soc of Neuropathologists and Psychiatrists. Histological investigation showed only gliose reaction in primary myelitis, which confirms the virus etiology. Therapy consists of penicillin in large doses, especially during the acute period. The use of "RD" is recommended.

191T106 ✓

SHOSTAKOVSKIY, M.F.; KOMAROVA, L.I.; PUKHINAREVICH, V.B.; KOMAROV, N.V.;
ROMAN, V.K.

3,5-Dinitrobenzoylhydrazones of organosilicon carbonyl compounds.
Izv.AN SSSR.Ser.khim. no.2:382-384 r '64. (MIRA 17:3)

1. Irkutskiy institut organicheskoy khimii AN SSSR.

RUMANIA

FLESCHEIN, H., Dr, Col, MARINESCU, A., Dr, Lt-Col, ROMAN, V., Dr, Maj, and VASILE, Al., Dr, Cpt [affiliation not given]

"Considerations on the Current Treatment of Recurrent Scapulo-Humeral Dislocations in the Military Environment."

Bucharest, Revista Sanitara Militara, Vol 62, No 2, Mar-Apr 66, pp 221-224.

Abstract: Observations based on 15 cases of recurring dislocations treated surgically as follows: 9 by the Von Wahl operation (one recurred); 3 by the Wilmoth-Lenormant operation (one recurred); 2 by the Stavrache modification of the Bankart operation (one recurred), and one by the original Bankart operation (good results). Special emphasis is devoted to a description of the Bankart procedure, which the authors find preferable to the other methods and plan to use more frequently in the future.

Includes 3 references, of which one German and 2 Rumanian.

TARAKHOVSKIY, M.L.; FEL'MAN, I.M.; ROMAN, V.I.

Pharmacotherapy of hyperkinesis with cholinolytic derivatives of quaternary ammonium compounds; Experimental and clinical observations. Zhur.nevr.i psikh 60 no.8:957-964 '60. (MIRA 13:9)

1. Otdel farmakologii (zaveduyushchiy - prof. S.V.Anichkov) Instituta eksperimental'noy meditsiny, kafedra farmakologii (zaveduyushchiy - prof. S.P. Zakrivodoroga) i klinika nervnykh nervnykh bolezney (zaveduyushchiy - prof. S.N.Savenko) Chernovitskogo meditsinskogo instituta.

(MOVEMENT DISORDERS)

(AUTONOMIC DRUGS)

S/186/62/004/003/007/022
E071/E433

AUTHORS: Nikolayev, A.V., Torgov, V.G., Roman, V.K.,
Mikhaylov, V.A., Kotlyarevskiy, I.L.

TITLE: The synthesis and investigation of compounds of
uranyl salts with pyridine oxide derivatives

PERIODICAL: Radiokhimiya, v.4, no.3, 1962, 296-304

TEXT: The authors studied the interaction of pyridine oxide derivatives (pyridine-N-oxide); γ -nitropyridine oxide; α -picoline-N-oxide; 2,6-lutidine-N-oxide; 2,3,6-trimethylpyridine-N-oxide; 2,3,5,6-tetramethylpyridine-N-oxide and 2-methyl-6-phenylpyridine-N-oxide) with uranyl salts (nitrate, sulphate and chloride). The synthesis of compounds of uranyl salts with pyridine oxides was done by mixing 10 to 15% alcoholic solutions of a pyridine oxide with alcoholic solutions of uranyl salts in a ratio of uranyl salt : pyridine oxide = 1:3 (in the case of γ -nitropyridine oxide an aqueous solution was used). Altogether 11 complex compounds of uranyl salts with pyridine oxides were obtained and some of their properties investigated. The composition of the compounds was: $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{PyOx}$; ✓

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S/186/62/004/003/007/022
E071/E433

The synthesis and ...

$\text{UO}_2(\text{NO}_3)_2 \cdot 3\text{PyOx}$ (synthesized in aqueous medium); $\text{UO}_2\text{SO}_4 \cdot 2\text{PyOx}$; $\text{UO}_2\text{Cl}_2 \cdot 2\text{PyOx}$. Differential thermal analysis of the compounds indicated that the first effect is an endothermic one, it is not associated with any visual changes in the compounds (with the exception of $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{C}_6\text{H}_7\text{NO}$ which melts at 160°C and $\text{UO}_2\text{SO}_4 \cdot 2\text{C}_5\text{H}_5\text{NO}$ which changes colour at 200°C) and is assumed as being due to the splitting of one or two molecules of pyridine oxide which can be accompanied by melting. The temperature of this effect can be taken as a measure of the strength of the complex. A steady decrease of this temperature in the series: $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{C}_5\text{H}_5\text{NO}$ (220°C), $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{C}_6\text{H}_7\text{NO}$ (160°C), $\text{UO}_2(\text{NO}_3)_2 \cdot 2\text{C}_7\text{H}_9\text{NO}$ (120°C) indicate that the introduction of the methyl group in the α -position in respect of nitrogen leads to a decrease in the strength of the bond $\text{UO}_2^{2+} \dots \bar{\text{O}} - \overset{+}{\text{N}} \ll$

The compounds are well soluble in water and little soluble in organic solvents. Complexes with α -picoline oxide are somewhat better soluble in organic solvents. This is ascribed to lack of symmetry in the α -picoline molecule. It is thought that this

Card 2/3

The synthesis and ...

S/186/62/004/003/007/022
EO71/E433

non-symmetrical hydrophobization of α -picoline molecule can be enhanced by the introduction of one or two long alkyl chains and thus produce complexes well soluble in organic solvents and insoluble in water. A decrease in the polarity of the N — O bond through the introduction of electrophilic substituents, e.g. halogens may have a similar effect. In this way compounds suitable as extracting agents could be obtained. This problem is being investigated. There are 4 figures and 7 tables. ✓

SUBMITTED: April 11, 1961,

Card 3/3

REMAN, Ya.

"The Parasite Fauna of Commercial Fish of the Duna (Danube) River and Its Practical Significance." Cand Biol Sci, Leningrad State U, Leningrad, 1953. (RZhBiol No 1, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (13) SO: Sum. 598, 20 Jul 55

ROMAN, YE.

Parasites - Fish

Parasitic fauna of sunfish *Lepomis gibbosus* (L.), acclimatized in the Danube. Dokl.
AN SSSR 89, No. 4, 1953.

SO: Monthly List of Russian Accessions, Library of Congress, June 1953, Uncl.

THE UTILIZATION OF INVESTMENT FUNDS.

p. 6 (12 JAN I LET) BUDAPEST, HUNGARY. VOL. 34 NO 6 APR 1957

Q: MONTHLY INDEX OF EAST EUROPEAN ACQUISITIONS (AEEI) VOL. 6 NO 11 NOVEMBER 1957

ROMAN, Zoltan, a kozgazdasagi tudomanyok kandidatusa (Budapest)

Scientific conference on statistics in Budapest. Magy tud 68 no.10:
624-627 0 '61.

1. Osztalyvezeto, Kozponti Statisztikai Hivatal, Budapest.

ROMAN, Zoltan

"English and American productivity and comparative costs in international trade" by Robert M. Stern (from Oxford Economic Papers, no.3, 1962). Reviewed by Zoltan Roman. Stat scale 41 no.5:539-540 My '63.

ROMAN, Zoltan

Testing the up-to-dateness of industrial products. Musz elet
19 no.18:7 27 Ag '64.

ROMAN, Zoltan

Direct measurement of labor productivity in industries. Stat
szemle 37 no.3:274-298 Mr '59.

NYITRAI, Ferencne; ROMAN, Zoltan

Some experiences of a Polish study tour and scientific
conference. Stat szemle 38 no.4:394-401 Ap '60.

ROMAN, Zoltan

"Scientific studies in statistics", edited by V.S.Nemchinov.
Vol.3: "Questions relating to the balance sheets of national
economy and labor productivity." Reveiwed by Zoltan Roman.
Stat szemle 37 no.4:457-458 Ap '59.

ROMAN, Zoltan

"Statistical groupings in the study of the Soviet Union's
industrial economy" by N.G.Grachev. Reviewed by Zoltan Roman.
Stat szemle 37 no.4:461-462 Ap '59.

ROMAN, Zoltan

"Labor productivity in theory and practice" by Gerhard Richter.
Reviewed by Zoltan Roman. Stat szemle 37 no.4:463-464 Ap '59.

LUKACS, Otto; ROMAN, Zoltan

Re-examination of the industry's net production index. Stat
szemle 37 no.5:475-496 My '59.

1. "Statisztikai Szemle" szerkeszto bizottsagi tagja (for Lukacs).

ROMAN, Zoltan

On the world level of technology. Musz elet 17 no.18:6 30 Ag '62.

ROMAN, Z.

The concept of economy and tasks for its practice in industry. p. 2.
TCHOTRELES. Budapest. Vol. 10, No. 2, Feb. 1956

SOURCE: East European Accessions List (EEAL) Library of Congress
Vol. 5, No. 6, June 1956

ROMAN, Z.

Some timely problems of planning in enterprises. p. 12.

TOBBTERMELES, Vol. 9, No. 7, July 1955

(Uzemi Tervgazdasagi es Szervezesi Tudomanyos Egyesulet) Budapest

SOURCE: EAST EUROPEAN ACCESSIONS LIST Vol. 5, No. 1 September, 1956

Roman, Z., (Mrs.)

15. Independent accounting system for brigades in civil engineering -- *Brigadok onallo elszamolasi rendszere a melyepitoiparban* -- by Mrs. Z. Roman (Industrial Organization -- *Tobbtermeles* -- Vol. V, No. 1-2, pp. 51-57, Jan-Feb. 1951, 1 fig.)

One of the most important instruments of Socialist production is the independent accounting of individual units within enterprises. This is also valid in the field of civil engineering, however, in divergent forms suited to special requirements. Separate accounting, in fact, separate bookkeeping must be introduced at the scattered work sites, as this will facilitate control as well as payment of equitable premiums and the evaluation of work competition. For further breaking down costs, independent accounting for each brigade was tried out; the experiment led to favourable results. The theoretical and practical details of work site accounting are dealt with.

ROMAN, Zoltan, dr.

"Production structure of the USSR and foreign countries on the basis of their input-output balance" by L. Berri, Ju. Svirkov [Suyrkov, Yu.]. Reviewed by Zoltan Roman. Stat szemle 41 no.7:771-773 J1 '63.

1. Központi Statisztikai Hivatal osztályvezetője.

ROMAN, Zoltan, Dr.

An international conference on input-output methods. Stat szemle
40 no.1:80-82 Ja '62.

ROMAN, Z.

"The operative chronological planning of production in the machine industry." p. 11.
(TECHNICALS, Vol. 6, no. 6, June 1952. Budapest.)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of Congress
August, 1953, Uncl.

11 Independent accounting for departments within an enterprise. By the Institute of Communist Industrial Organization, Nov. 1954, p. 100. (10 July 1959)

Following the example of the Soviet Union, the question of independent accounting within enterprises has given close attention in the country. The Planning and Control issued a decree which established the principles of this system and outlined the method for its employment in industry and in transportation. From the standpoint of introduction of independent accounting, further development of work competition consistently through the principles of socialist wage system, and assertion of increased individual responsibility are expected to be realized. In the sphere of work competition, it is hoped that over and above the quantitative fulfillment of the production plans other factors connected with the work, such as productivity, cost of production and quality, will increasingly improve. The evaluating of the individual fulfillment of the plans can be directed only through extending the fulfillment of the whole workshop, respectively, through accounting per workshop. Apart from work competition, only the accounting per workshop will furnish satisfactory results under a socialist wage system. For the correct application of the government's decree on bonuses and incentives for office workers, the price quality of work system should be very important and the incentive fund should be extended not only tied with the profit margin, but should be extended also instance, down to the workshop level. For this, each workshop must have its own independent accounting. The enterprise should then plan the work of their approved plants, and the productivity and economy of the normal production should be controlled by the State. The factories of the enterprise should be controlled through their account with the National Plan. This method of management proved to be successful with large enterprises and should now be extended to smaller plants. Thus, in essence, the enterprise should obtain in workshop accounting a method of evaluating the entire enterprise. The article further elaborates on the elaboration and establishment of the plan for production, technical development, material consumption, productivity, quality of work, and production etc.

BORKOWSKI, Tomasz; ROMAN-TUSZKIEWICZ, Alfred

Chromatographic modification of galactose liver function test.
Ann. Univ. Lublin; sec. D 9:131-158 1954.

1. Z Zakładu Chemii Fizjologicznej Akademii Medycznej w Lublinie.
Kierownik: prof. dr. Janina Opienska-Blauth. Z II Kliniki Chorob
Wewnętrznych Akademii Medycznej w Lublinie. Kierownik: prof. dr.
Alfred R. Tuszkiewicz.

(LIVER FUNCTION TESTS,
galactose tolerance, chromatographic modification.)

1ST AND 2ND INDICES																									
PROCESSES AND PROPERTIES INDEX													180 AND 1TH CODES												
<i>BC</i> <i>B-I-9</i> <i>Send clay substances and their use in glass furnaces. H. E. Rasmussen (Keweenaw, 1963, 9, No. 9, 10-19). Send clay substances (containing 65% of quartz sand) having softening temp. 1730-1750° can be used in place of SiO₂ brick in furnace crowns. Their mechanical strength is low. Ch. Abs.</i>																									
ASB-3LA METALLURGICAL LITERATURE CLASSIFICATION																									
13000 STIMULUS													13000 STIMULUS												
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AUTHOR INDEX																										MATERIALS INDEX																									
Momencho, N. K. SAND-CLAY REFRACTORIES AND THEIR USE IN GLASS FURNACES. <i>Keram. i Staklo</i> , 9 [9] 10-10 (1964). Examples of the rational use of sand clay refractories in various glassworks are described. The material is produced from a mixture of raw refractory clay (35%) and quartz sand (65%). Its melting temperature is from 1720 to 1750° and its behavior during melting is similar to that of silica brick. It advantageously replaces the latter in the crowns of small and medium sized glass furnaces. The life of the setting of a tank made of sand clay refractories is not shorter than that of average firebrick. Its defect is a low mechanical resistance. Its low price and the facility of its mechanical production make this material advantageous in many cases.																																																			

CA 19

Sand-clay refractories and their use in glass furnaces.
 N. E. Romancha. *Keram. i Staklo* 9, No. 9, 10-19 (1933).—Sand-clay refractories contain a mixt. of 35% raw refractory clay and 65% quartz sand. The softening temp. is 1720-50°. They can be used in place of SiO₂ brick in furnace crowns. Their mech. strength is low.
 M. V. Kondoidy

COMMON ELEMENTS

COMMON VARIABILITY INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND LETTERS

3RD AND 4TH LETTERS

5TH AND 6TH LETTERS

7TH AND 8TH LETTERS

9TH AND 10TH LETTERS

11TH AND 12TH LETTERS

13TH AND 14TH LETTERS

15TH AND 16TH LETTERS

17TH AND 18TH LETTERS

19TH AND 20TH LETTERS

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89TH AND 90TH LETTERS

91ST AND 92ND LETTERS

93RD AND 94TH LETTERS

95TH AND 96TH LETTERS

97TH AND 98TH LETTERS

99TH AND 100TH LETTERS

ROMANCHENKO, A.A., nauchnyy sotrudnik

Leaf rollers as pests of fruit plantations in southern Odessa
Province. Zashch. rast. ot vred. i bol. 6 no.10:57 0 '61.

(MIRA 16:6)

(Odessa Province—Fruit—Diseases and pests)

(Odessa Province—Leaf rollers—Extermination)

ROMANCHENKO, A.F. (Kiyev)

Theorem on the variation of the kinetic moment of a
deformed mass-point system of variable composition.

Prikl. mekh. 1 no.12:122-127 '65.

(MIRA 19:1)

1. Institut mekhaniki AN UkrSSR. Submitted Feb. 12, 1965.

ROMANCHENKO, A.S.; D'YACHKOVA, L.A.

New method for joining copper tubing. Gidroliz. i lesokhim.prom. 10
no.5:26-27 '57. (MLBA 10:8)

1.Yangi-Yul'skiy gidroliznyy zavod.
(Pipe, Copper)

ROMANCHENKO, G., inzhener.

~~Over-all mechanization in stores at the Moscow Basin mines. Mast.~~
ugl. 6 no.7:6-8 J1 '57. (MLRA 10:9)
(Moscow Basin--Materials handling)

ROMANCHENKO, Aleksandr Vladimirovich

[Problems in the economics of stockbreeding] Voprosy ekonomiki
zhivotnovodstva. Moskva, Sel'khozgiz, 1957. 206 p. (MIRA 11:4)
(Stock and stockbreeding)

Cultivation of grain is the basis of agriculture. Moscow, 1954. 32 p.
(Vsesoyuznoye obshchestvo po razvoitiye i uvelicheniye vyidov i vykhodov zrna i
berlyu. Ser. 33) (1-1934)

5317-2

1. State - California

ROMANCHENKO, Aleksandr Vladimirovich

"The Development of Grain Farming in the USSR";

Dissertation for the degree of Doctor of Economic Sciences
Awarded by the Timiryazev Agricultural Academy, 1962)

(Izvestiya Timiryazevskoy Sel'skokhozyaystvennoy Akademii, Moscow, No. 2,
1963, pp 232-236)

BADIR'YAN, G.G., prof.; VASIL'YEV, N.V., prof.; KOTOV, G.G., prof.;
RUDAKOVA, Ye.A., prof.; BRAGINSKIY, B.I., doktor ekon.nauk;
GUMEROV, M.N., dots.; ROMANCHENKO, A.V., doktor ekon. nauk;
ABRAMOV, V.A., dots.; ALTAYSKIY, I.P., kand. ekon. nauk;
GAVRILOV, V.I., dots.; RAFIKOV, M.M., kand.ekon. nauk;
VINOKUR, R.D., dots.; RUSAKOV, G.K., dots.; LAVRENT'YEV,
V.N., dots.; GORELIK, L.Ya., red.; PONOMAREVA, A.A., tekhn.
red.

[Economics, organization and planning of agricultural produc-
tion] Ekonomika, organizatsiya i planirovanie sel'skokho-
ziaistvennogo proizvodstva. Moskva, Ekonomizdat, 1963. 607 p.
(MIRA 16:11)

(Agriculture--Economic aspects)

ROMANCHENKO, Aleksandr Vladimirovich, kandidat ekonomicheskikh nauk; BENVUMOV, O.M., redaktor; GUBIN, M.I., tekhnicheskii redaktor.

[Mechanization of Soviet agriculture and its economic significance]
Mekhanizatsiia sel'skogo khoziaistva SSSR i ee ekonomicheskoe znachenie. Moskva, Izd-vo "Znanie," 1957. 38 p. (Vsesoiuznoe obshchestvo po rasprostraneniuiu politicheskikh i nauchnykh znani. Ser.5, no.6)
(MLRA 10:4)

(Farm mechanization)

NAYDENOV, V.V., inzh.; SIVER, L.Ya., inzh.; ZAVRAZHNYI, I.M., inzh.;
BORYAK, A.T., inzh.; ROMANCHENKO, F.V., inzh.

Semidry pressing of kaolin bricks. suggested by V.V.
Naidenov and others. Rats.i izobr.predl.v stroi. no.11:
79-82 '59. (MIRA 13:3)

1. Po materialam plitochного zavoda, stantsiya Losevo,
Khar'kovskogo sovnarkhoza.
(Kaolin)

RCMANCHENKO, G., inzh.

Motor-driven chamshell for timbering. Mast. ugl. 7 no.2:22-23 F
'58. (MIRA 11:3)

(Material handling) (Mine timbering)

ROMENETENKO, G.H., inzh.

Reinforced concrete mine ties designed by the Moscow Region
Scientific Research and Design and Planning Coal Institute.
Ugol' 40 no.4:76 Ap '65. (MIPA 18:5)

1. Podmoskovnyy nauchno-issledovatel'skiy i proyektno-
konstruktorskiy ugol'nyy institut.

ROMANCHENKO, G.N., inzh.

Readers' response to the article by S.Kh.Khusainov "Economizing on lumber in Kuznetsk Basin mines is an important potential for lowering the cost of coal"; "Ugol'," 1962, No.7. Ugol' 39 no.2: 70-72 F '64. (MIRA 17:3)

1. Podmoskovnyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy ugol'nyy institut.

ROMANCHENKO, G. (g. Pushkin, Leningradskoy oblasti)

Problems of the profitability of collective farm production.
Vop. ekon. no.12:55-60 D '59. (MIRA 12:12)
(Collective farms)

ROMANCHENKO, V., inzhener; ROMANCHENKO, G., inzhener.

Over-all lumber yard work mechanization. Mast. ugl. 4 no.11:
21-23 N '55. (MLBA 9:2)
(Lumberyards) (Moscow Basin--Material handling)

1. ROMANICHENKO, G.
2. USSR (600)
4. Economics
7. The subject of the economics of socialist agriculture, Vop.ekon. no. 4, 1953.
9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

ROMANCHENKO, G.A.; CHARNY, A.M. (Zhdanov)

▲ case of intratracheal goiter. Probl.endok. 1 gorm. 5
no.3:88-90 My-Je '59. (MIRA 12:9)

1. Iz otolaringologicheskogo otdeleniya (zav. G.A.Romanchenko)
i patologoanatomicheskogo otdeleniya (zav. A.M.Charnyy) mediko-
sanitarnoy chasti ordena Lenina zavoda imeni Il'icha (glavnyy
vrach M.L.Samoylovich).

(GOITER, case reports
intratracheal (Rus))

ROMANCHENKO, G.K.

Correcting the defects in steel castings. Proizv.opyt v
tiazh.mash. no.3:37-41 '55. (MLRA 10:2)

(Steel castings)

ROMANCHENKO, G.N.

Industrial development of the Krivoy Rog Basin (before 1917).
Trudy Inst.ist.est.i tekhn. 33 '60. (MIRA 13:8)
(Krivoy Rog Basin--Mines and mineral resources)

ROMANCHENKO, G. N., Cand Tech Sci -- (diss) "Some historical questions of the technical development of the Krivorozhskiy iron ore basin in pre-revolutionary times." Moscow, 1960. 19 pp; (Academy of Sciences USSR, Inst of the History of Natural Science and Technology); 150 copies; price not given; (KL, 17-60, 159)

ROMANCHENKO, G.N., inzh.

Over-all mechanization of operations in the lumber yards of the
Tulaugol' Combine mines. Ugol' 35 no. 12:4-6 D '60. (MIRA 14:1)

1. Podmoskovnyy nauchno-issledovatel'skiy ugol'nyy institut.
(Tula Basin--Coal mines and mining--Equipment and supplies)
(Lumber yards)

ROMANCHENKO, G.N.

Aleksandr Nikolaevich Pol'. Trudy Inst.ist.est.i tekhn. 33:201-210
'60. (MIRA 13:8)

(Pol', Aleksandr Nikolaevich, 1832-1890)

ROMANCHENKO, G.H.

Mechanizing loading and unloading operations in mine lumber yards of the Moscow Coal Basin. Ugol' 33 no.4:35-36 Ap '58. (MIRA 11:4)

1. Proyektaya kontora kombinata Tulaugol'.
(Moscow Basin--Coal mines and mining--Equipment and supplies)
(Mine timbering)

ROMANCHENKO, V.N., inzhener; ROMANCHENKO, G.N., inzhener.

For efficient mechanization of log dumps. Mekh.trud.rab.10 no.7:
14-16 J1 '56. (MIRA 9:9)

(Lumbering--Machinery)

ROMANCHENKO, G. N.

Cand Tech Sci - (diss) "Several problems of the history of technical development of the Krivoroshskiy Iron-Ore Basin in pre-revolutionary time." Moscow, 1961. 21 pp; (Inst of Mining Affiars imeni A. A. Skochinskiy); 200 copies; price not given; (KL, 10-61 sup, 218)

ROMANCHENKO, Grigoriy Nikitovich; ROMANOVA, L.A., red.izd-va; SMOLDYREV,
A.Ye., otv.red.; ISLENT'YEVA, tekhn.red.; PROZOROVSKAYA, tekhn.red.

[Arrangement and operation of mine lumber yards] Ustroistvo i
ekspluatatsia rudnichnykh lesnykh skladov; spravochnoe ruko-
vodstvo. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu,
1959. 119 p. (MIRA 13:4)
(Lumber yards) (Mine timbering)

ROMANCHENKO, G.R.

6

BADAR'YAN, G.G.; TYUTIN, V.A.; CHEREPUSHKIN, S.D.; ZUZIK, D.T.;
KHODASEVICH, B.G.; REYER, S.V.; GURANOV, Ye.I.; KAZANSKIY,
A.M.; KASSINOV, L.N.; KARAYEV, S.A.; ABRAMOV, V.A.;
VASIL'YEV, N.V.; BUGAYEV, N.F.; SAPIL'NIKOV, N.G.; KASTOREN,
A.A.; RUDNIKOV, V.N.; YAKOVLEV, V.A.; PENEZKIN, V.I.;
ISAYEV, A.P.; KUZ'NICHEN, N.N.; IL'DI, S.A.; PRONIN, V.A.;
LUR'YANOV, A.D.; SHAKHOV, Ya.K.; IL'ICHEV, A.K., kand. sel'-
khoz. nauk; KOGAN, A.Ya.; TSYNKOV, M.Yu.; BABIY, L.T.;
OGNEBUNOV, I.I.; KOVALEV, A.M.; ROMANCHENKO, G.R.; BRODSKAYA,
M.L., red.; IVANOVA, A.N., red.; GUREVICH, M.M., tekhn. red.;
TRUKHINA, O.N., tekhn. red.

[Economics of agriculture] Ekonomika sotsialisticheskogo sel'-
skogo khoziaistva; kurs lekttsii. Moskva, Sel'khozizdat, 1962.
710 p. (MIRA 15:10)

(Agriculture—Economic aspects)

SEREGIN, N.G.; ROMANCHENKO, I.F.

Veterinary workers of Tula Province in the campaign to increase livestock production. Veterinariia 35 no.5:23-28 My '58.
(MIRA 12:1)

1. Zamestitel' predsedatelya Ispolkoma Tul'skogo oblastnogo Soveta deputatov trudyashchikhsya (for Seregin). 2. Nachal'nik veterinarnogo otdela Oblsel'khozupravleniya (for Romanchenko).
(Tula Province--Veterinary medicine)

ROMANCHENKO, I.P.; OVSYANOV, N.I.; YEPIFANOV, G.F.; OVANESOVA, N.B.;
SHMULEVICH, I.S.

Throughout the Soviet Union. Veterinariia 35 no. 7:92-95 J1 '58.
(Veterinary medicine)

ROMANENKO, I.N., akademik, otvetstvennyy red.; VLASYUK, P.A., akademik, red.;
ZEROV, D.K., akademik, red.; RODIONOV, S.P., red.; TYULENEV, N.A.,
red.; PSHENICHNYI, P.D., akademik, red.; DAVYDOV, G.M., kand. ekon.
nauk, red.; KUGUKALO, I.A., kand. ekon. nauk, red.; BEREZIKOV, V.S.,
red.; FEDUN, A.D., red.; KOZAKEVICH, T.A., red. izd-va; SIVACHENKO,
Ye. K., tekhn. red.

[Problems in the economy of Polesye; transactions of a conference]
Voprosy ekonomiki Poles'ia; trudy konferentsii. Kiev, Izd-vo Akad.
nauk USSR, Vol. 4. 1958. 134 p. (MIRA 11:10)

1. Konferentsiya po voprosam razvitiya proizvoditel'nykh sil
Poles'ya USSR. 1955. 2. Akademiya nauk USSR (for Vlasjuk, Zerop.).
3. Ukrainskaya Akademiya sel'skokhozyaystvennykh nauk (for Vlasjuk,
Romanenko, Pshenichnyy). 4. Vsesoyuznaya Akademiya sel'skokhozyay-
stvennykh nauk im. V.I.Lenina (for Vlasjuk). 5. Chlen-korrespondent
Vsesoyuznoy Akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina
(for Romanenko). 6. Chlen-korrespondent Akademii nauk USSR (for
Rodionov, Tyulenev). 7. Zamestitel' nachal'nika otdela svodnykh
perspektivnykh planov Gosplana Soveta Ministrov USSR (for Beresikov).
8. Nachal'nik podotdela sel'skogo khozyaystva i zagotovok otdela
svodnykh perspektivnykh planov sel'skogo khozyaystva Gosplana
Soveta Ministrov USSR (for Fedun).

(Polesye--Economic conditions)

Romanchenko, K. G.

✓ Coatings and mortars for lightweight Dinas. I. S. KAYNARSKII
 MT I. A. GETMAN, AND K. G. ROMANCHENKO. Ogneupory, 20 [2]
 51-58 (1955).—The mixtures should be prepared from 90 to 92%
 Dinas grog and 10 to 8% low-sintering plastic clay. The grog
 should be below 2 mm.; large fractions of grains below 0.088
 mm. should be avoided. Clay particles should be below 1 mm.
 The grain size of coatings should be as follows: 1.5 mm. not over
 5%, 1.5 to 1 mm. 10 to 15%, 1 to 0.088 mm. 55 to 50%, and <0.088
 mm. not over 30%. SiO_2 should be not less than 88%, and
 $\text{Al}_2\text{O}_3 + \text{TiO}_2$ not over 5%. Mortars should have the same com-
 position but the following grain size: 1.5 to 1 mm. 0.7%, 1 to
 0.5 mm. 10%, 0.5 to 0.088 mm. 47%, and <0.088 mm. 43%.
 B.Z.K.

(2)

[Handwritten signature]

ROMANCHENKO, K.G.

✓ 2027. Production of silica bricks of improved abrasion resistance for use in coke-oven soles. G. B. TAUBIN, K. G. ROMANCHENKO, and D. I. PANKRATOV (*Ogneupory*, 21, 54, 1956). In Russian. With OYUDENSKII quartzite, 10% of crushed silica brick and a bond with a CaO:FeO ratio between 1:1 and 2:1, and the following grading: coke-oven sole bricks of the following properties were produced; porosity, <16%; crushing strength, ≥ 600 kg/cm² (8,550 lb/in²); drum abrasion resistance, <8%. Grading: 3-mm., <1%; <0.54 mm., 52-58% (<0.088 mm., 32-36%); moisture, 4.4-4.6%; FeO, 1.2-1.7%; sulphite lyc (on dry basis), 0.6-0.8%. The bricks were maintained at top temperature in the kiln for 3-5 hr. longer than usual. (3 figs., 2 tables.)

Meth

Referred to the
AUTHORS: Margulis, O.M., Romanchenko, K.G., and Getman, I.A.
TITLE: Sheaths for immersion thermocouples. (Nakonechniki dlya termopar pogruzheniya).

PERIODICAL: "Stal'" (Steel), No.8, 1957, pp.714-715 (USSR).

ABSTRACT: Methods of producing refractory thermocouple sheaths for immersion thermocouples resistant to thermal shock and able to withstand not only a large number of short immersions but also prolonged immersion, were investigated. T.K.Kazanskaya (laboratory assistant) participated in the investigation. It was established that the best method of manufacturing is by freezing a layer of a mixture of refractory powder with paraffin and oleic acid on to an immersed rod (at 50-70 C). It is stated that the appropriate compositions for manufacturing various refractory sheaths were established but no details given. As all types of protective coatings based on metallurgical magnesite and zirconia stabilised with lime were developed. The size distribution required for the above two materials are given. As a binder, an alcoholic sulphite lyle was used. Tests carried out in a high frequency furnace at 1600-1700C indicated that sheets from technical corundum coated with a

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13(6)

SOV/131-58-11-719

AUTHORS: Kaynarskiy, I. I., Romanchenko, K. G., Pindrik, R. Ye.

TITLE: The Problem of Placing Unfinished Dinas Bricks on the Buggies of the Tunnel Kila (K voprosu o sadke dinasovogo sirtsa na vagonetki tunnel'noy pechi)

PERIODICAL: Ogneopory. 1958. Nr 11, pp 521-526 (USSR)

ABSTRACT: When unfinished bricks of a size of 22,6 . 11,2 . 6,4 cm and an average weight of 3,5 kg are piled up while still wet, tensions are created by pressure, bending and compression. Tests revealed that unfinished dinas bricks have a sufficiently high compression limit to support the weight of a pile of unfinished bricks of a height of 1,6 m, which is, however, not true of their bending strength (Table 1). The compression strength of a regular pressed unfinished dinas brick corresponds to the specific pressure on the bottom row of bricks of a pile (Table 2). In order to obtain greater strength, the bricks were pressed with a pressure of approximately 600 kg/cm² after a sulphite-alcohol vinasse and the intensifier VB were added (Table 3). The results obtained in the laboratory were tested under industrial conditions in the Test Plant, ENITW as

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GOV/131-58-11-719

The problem of placing unfinished dinas bricks on the Buggies of the Tunnel Kiln

well as in the Krasnogorovskiy and Zaporozhskiy Plants for Refractory **Materials** (table 4). The results were tested in the Plant for Refractory **Materials** imeni Lenin as well as in the tsakh khromomagnezitovyykh izdeliy Zaporozhskogo ogneporogo zavoda (Department of Chrome Magnesite Products of the Zaporozhskiy Plant for Refractory **Materials**). Yu. P. Sidorenko, B. I. Gorfinkel', and P. I. Pazukha took part in the research (Ref 2). Regular bricks were piled up as in figure 1 and vault bricks as in figure 2. The results of sorting of these tests are shown in table 5.

Conclusions: it is possible to produce unfinished dinas bricks of sufficient strength: the greater strength is obtained by pressing at a pressure ≥ 350 kg/sq.cm or by a combined addition of sulphite-alcohol vinasse and cast intensifier KB at usual pressure up to a specific weight of 2,25 - 2,25 g/cb.cm: unfinished dinas bricks of thus increased strength can be piled on the kiln buggy immediately away from the press: there is a possibility of drying the unfinished dinas bricks in the preheating zone of the tunnel kiln, which would make special

SOV/131-58-11-7/9

The Problem of Placing Unfinished Dinas Bricks on the Buggies of the Tunnel
Kiln

drying unnecessary.

There are 2 figures, 5 tables, and 4 references, 2 of which
are Soviet.

ABSTRACT: Kirovskiy nauchno-issledovatel'skiy institut ognenporov
(Ukrainian Scientific Research Institute of Refractory Materials)

Card 1/3

15(2)

AUTHORS:

Margulis, O. M., Romanchenko, K. G.,
Rutman, D. S., Vinogradova, L. V.

SOV/131-59-4-4/16

TITLE:

The Terminal Pieces of Immersion Thermocouples (Nakonechniki
dlya termopar pogruzheniya)

PERIODICAL:

Ogneupory, 1959, Nr 4, pp 157-161 (USSR)

ABSTRACT:

Immersion thermocouples with terminal pieces of quartz can be used only one time up to a temperature of 1600° . The platinum - platinum-rhodium thermocouples are further rapidly worn out. In the Podol'sk plant of refractories experiments with terminal pieces of technical alumina are carried out, the technology devised by UNIIO serving as a basis (Fig 1). A set of 500 terminal pieces was tested in the works "Elektrostal'" by representatives of manufacturers and consumers, of the Ukrainian and All-Union Institutes of Refractories, and the Tsentral'naya laboratoriya avtomatiki Ministerstva stroitel'stva RSFSR (Central Laboratory of Automation of the Ministry of Building of the RSFSR). The laboratory of the Podol'sk works performed petrographical investigations in which N. V. Gul'ko assisted (Ref 1, Figs 2 and 3). The influence of burning and of an addition of 1% TiO_2 was investigated. The results are

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The Terminal Pieces of Immersion Thermocouples

SOV/131-59-4-4/16

given in the table and the typical cuts in figure 4. Conclusions: The increased thermal stability of terminal pieces of technical alumina is guaranteed by the presence of two corundum crystal types: fine isometric and coarse prismatic.

Further the technology of production of this corundum crystallization is given and recommended to all works producing refractories in order to supply metallurgical plants with suitable terminal pieces for thermocouples. There are 4 figures, 1 table, and 5 references, 4 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute of Refractories), Podol'skiy zavod ogneupornykh izdeliy (Podol'skiy Works for Refractories)

Card 2/2

15(2)

AUTHORS:

Margulis, O. M.,
Romanchenko, K. G., Stovbur, A. V.

S/131/60/000/03/009/013
B015/B005

TITLE:

Dense Products of Magnesium Oxide With Increased Thermal Stability

PERIODICAL:

Ogneupory, 1960, Nr 3, pp 132-137 (USSR)

ABSTRACT:

In this paper the authors describe an economic procedure for the manufacture of fully sintered products of magnesium oxide with admixtures and at practically attainable temperatures. Table 1 indicates the chemical composition of the initial raw material and of the admixtures. Tables 2-4 show the characteristics of the magnesium-oxide samples with admixtures burnt at 1750°. The preparation of raw materials is thoroughly described, and the method of Grebenyuk (UNIIO) is referred to. In conclusion, the authors state that a procedure was worked out for the manufacture of plates with a porosity of 1-3% made of magnesium oxide with spinel linkage. They offer increased thermal stability and considerable durability at high temperatures. The peculiarity of this procedure lies in the use of magnesium oxide burnt at high temperatures and finely

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Dense Products of Magnesium Oxide With Increased
Thermal Stability

S/151/60/000/03/009/013
B015/B005

ground, in the addition of highly disperse $\alpha\text{-Al}_2\text{O}_3$, the
pressing of unfinished pieces from "pseudogranular masses",
and the two-stage burning at 1450 and 1750° in capsules.
There are 4 tables and 11 references, 6 of which are Soviet.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneporov
(Ukrainian Scientific Research Institute of Refractories)



Card 2/2

MARGULIS, O.M.; ROMANCHENKO, K.G.; STOVBUR, A.V.; BASALOVA, G.K.

Immersion thermocouple tips made of zirconium dioxide with
a high thermal stability. Ogneupory 27 no.12:552-555
'62. (MIRA 15:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut
ogneuporov.

(Thermocouples)

S/131/62/000/012/002/004
B117/B186

AUTHORS: Margulis, O. M., Romanchenko, K. G., Stovbur, A. V.,
Basalova, G. K.

TITLE: Tips for immersion type thermocouples made from zirconium
dioxide of increased resistance to heat

PERIODICAL: Ogneupory, no. 12, 1962, 552 - 554

TEXT: Basing on previous experience (O. M. Margulis et al., Stal', 1957, no. 8; Ogneupory, 1959, no. 4; Sbornik rabot UNIIO, 1960, no. 3) tips for thermocouples were made from molten zirconium dioxide (mixture of cubic and monoclinic modifications) by ceramic casting and freeze-drying. Dross with pH = 1-2, 20% moisture, and 8 - 10 poise viscosity was used for casting. Dried dross with paraffin and oleic acid was used for freeze-drying. The tips produced by the two methods and annealed in periodic furnaces with petroleum heating at 1750°C had a porosity of 1 - 30%. Without protective coating they withstood 2 - 6 immersions in molten chromium at 2000 - 2040°C. Tests carried out under operating conditions in induction and steel arc furnaces showed that tips produced by the two methods withstood 2 - 3 immersions in molten metal and allowed of making temperature measurements at

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Tips for immersion type...

S/131/62/000/012/002/004
B117/B186

1700 - 1750°C. Their thermal inertia of 15 sec corresponded to that of quartz glass (12 - 20 sec). There is 1 table.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneporov
(Ukrainian Scientific Research Institute of Refractories)

Card 2/2

MARGULIS, O.M.; ROMANCHENKO, K.G.; STOVBUR, A.V.

Solid magnesium oxide products with an increased thermal stability. Ogneupor γ 25 no. 3:132-137 '60. (MIRA 13,10)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
(Magnesium oxide) (Refractory materials)

ROMANCHENKO, K.G.; KAYNARSKIY, I.S.

Interaction of calcium monoxide with silicon dioxide during the
blending of Dinas substances. Ogneupory 26 no.3:143-148 '61.
(MIRA 14:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
(Firebrick)

ROMANCO. ENKO, K.G.; KAYMA. SKIY, I.S.

Strength of green Dinas bricks and its determinative factors.
Ogneupory 26 no.1:31-41 '61. (MFA 1/4:2)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov.
(Firebrick--Testing)

S/133/60/000/011/009/023
A054/A029

AUTHORS: Amonenko, V.M., Romanchenko, K.G., Tron', A.S.

TITLE: Reaction Between Heat-Resisting Alloys and Refractory Oxides
at High Temperatures in Vacuum

PERIODICAL: Stal', 1960, No. 11, pp.1002-1004

TEXT: Many heat-resisting alloys contain elements which enter easily into reaction with the oxides of the refractory crucible during vacuum casting at high temperatures. Consequently, the alloys are contaminated with oxygen and with the material of the crucible which affects their mechanical properties. In order to investigate this phenomenon and to establish such a composition of the crucible that has least effect on the alloys, tests were undertaken with crucibles containing ZrO_2 , BeO , MgO , Al_2O_3 and $(Al_2O_3 + 1\% TiO_2)$ and nickel-base heat-resisting alloys of the 3N 617 (EI 617)-type at various temperatures and with various holding times in vacuum. The tests were carried out in resistance furnaces having molybdenum heaters, the crucibles were made from chemically pure oxides, having a porosity between 0-2% and which were stabilized with 5% MgO or CaO . In the tests the effect of casting temperatures, of the duration of the vacuum treatment and of the crucible material on the

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S/133/60/000/011/009/023
A054/A029Reaction Between Heat-Resisting Alloys and Refractory Oxides at High Temperatures in Vacuum ✓

gas content of the alloy were investigated while the quantity of non-metallic inclusions in the alloy was examined by petrographic analysis. It was found that the refractory materials of crucibles made from Al_2O_3 , ZrO_2 , MgO and BeO entered into reaction with the C of the casting. Al, Zr and Be reduced from the oxides was dissolved in the metal while carbon oxide and magnesium were eliminated in the gas-phase. The reduction process was accelerated by the rising temperature. The minimum reduction rate was observed at 1,450-1,500°C and the minimum amount of reduction products were found in the alloy when the vacuum process did not last longer than 20-30 minutes. The lowest oxygen content was found in alloys cast in ZrO_2 and BeO crucibles while the reduction process was the most intensive in MgO crucibles. When casting in Al_2O_3 -containing crucibles, an exchange reaction took place between metal and refractory material, during which chrome and titanium were oxidized and Al_2O_3 was reduced to Al_2O , followed by its decomposition into Al_2O_3 and Al. Petrographically it was established that Cr_2O_3 was present in the refractory substance, indicating a reaction between the crucible and the chrome of the alloy. The

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S/133/60/000/011/009/023
A054/A029

Reaction Between Heat-Resisting Alloys and Refractory Oxides at High Temperatures in Vacuum

tests on inclusions and the microscopic investigations showed spinelides of $Mg(Cr,Al)_2O_4$ in MgO crucibles, which were formed as a result of the reaction between the alloying elements and magnesium oxide. The higher the casting temperature, the longer the holding time of the metal and the lower the remaining pressure in the chamber, the more complete was the elimination of N and H from the alloy. The refractory materials were arranged according to their degree of resistance against reaction with the alloy in the following series: $MgO < Al_2O_3$; $(Al_2O_3 + 1\%TiO_2) < BeO < ZrO_2$. There are 5 figures and 8 references: 4 Soviet, 2 English, 1 German, 1 French.

ASSOCIATION: Fiziko-tehnicheskiy institut AN UkrSSR (Physical-Technical Institute AS UkrSSR), Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific-Research Institute of Refractory Materials)

Card 3/3

AMONENKO, V.M.; ROMANCHENKO, K.G.; TRON', A.S.

Interaction of heat-resistant alloys and refractory oxides at
high temperatures in vacuum. Stal' 20 no.11:1002-1004 N '60.
(MIRA 13:10)

1. Fiziko-tekhnicheskii institut AN USSR i Ukrainskiy nauchno-
issledovatel'skiy institut ogneuporov.
(Heat-resistant alloys—Metallurgy)
(Vacuum metallurgy)

POLYANSKIY, F.Ya., prof.; SHEMYAKIN, I.N., prof.; GLUKHAREV, L.I., dots.; ROMANCHENKO, L.N., kand. ekon. nauk; KAYYE, V.A., kand. ekon. nauk; MOTUS, P.P., kand. ekon. nauk; TYUSHEV, V.A., kand. ekon. nauk; ROMANCHENKO, L.N., kand. ekon. nauk; AVDAKOVA, Yu.K., kand. ekon. nauk, dots., red.; SPERANSKAYA, L., red.; VOSKRESENSKAYA, T., red.; NEZNANOV, V., mladshiy red.; NOGINA, N., tekhn. red.

[Economic history of capitalist countries] Ekonomicheskaya istoriya kapitalisticheskikh stran; kurs lektsii. Moskva, Sotsekgiz, 1962. 634 p. (MIRA 16:2)

(Economic history)

POLYANSKIY, F.Ya., prof.; SHEMYAKIN, I.N., prof.; GLUKHAREV, L.I., dots.; ROMANCHENKO, L.N., kand. ekon. nauk; KAYYE, V.A., kand. ekon. nauk; MOTUS, P.P., kand. ekon. nauk; TYUSHEV, V.A., kand. ekon. nauk; ROMANCHENKO, L.N., kand. ekon. nauk; AVDAKOVA, Yu.K., kand. ekon. nauk, dots., red.; SPERANSKAYA, L., red.; VOSKRESENSKAYA, T., red.; NEZNANOV, V., mladshiy red.; NOGINA, N., tekhn. red.

[Economic history of capitalist countries] Ekonomicheskaya istoriya kapitalisticheskikh stran; kurs lektsii. Moskva, Sotsekgiz, 1962. 634 p. (MIRA 16:2)

(Economic history)

ROMANCHENKO, I.I., kand. ekon.nauk; AVDAROV, Yu.K., dots., red.;
MINDAROV, A.I., dots., red.

[Economy of capitalist Germany during the general crises of capitalism; subject matter for a course on the "Economic history of capitalist countries" for the economics faculties of the Institute] Ekonomika kapitalisticheskoi Germanii v period obshchego krizisa kapitalizma; uchebnyi material po kursu "Ekonomicheskaiia istoriia kapitalisticheskikh stran" dlia ekonomicheskikh fakul'tetov instituta. Moskva, Zaochnyi in-t sovetskoi torgovli, 1963. 49 p. (MIRA 18:4)

ROMANCHENKO, M.S.

Constructive activity of the workers is growing. Metallurg
5 no. 12:38 D '60. (MHA 13:11)

1. Vneshtatnyy instruktor Oblsovprom.
(Pipe mills)

25675

S/122/60/000/005/012/017
A161/A130

1.4000

AUTHORS: Yanovskiy, I. I., Engineer; Tenenbaum, M. M., Candidate of Technical Sciences; Romanenko, N. K., Engineer

TITLE: Relieving internal stresses in soldering carbide tips on tools

PERIODICAL: Vestnik mashinostroyeniya, no. 5, 1960, 52-57

TEXT: Dimension changes from thermal expansion of metal are analyzed and a formula and a diagram are deduced for determining the proper linear deformation coefficient (β') at which stresses in soldered joint would be zero in given case, i.e., at a definite solder solidification point, steel composition and austenite transformation temperature. The formula is

$$\beta' = T_{\text{sol}}(\alpha_{\text{aust}} - \alpha_T) - T_{\text{tr}}(\alpha_{\text{aust}} - \alpha_{\text{dec}}) - 20^\circ(\alpha_{\text{dec}} - \alpha_T) \quad (4)$$

where T_{sol} is the solidification point of the solder; α_{aust} - the linear expansion factor of austenite; α_{dec} - the linear expansion factor of austenite decomposition products; T_{tr} - steel transformation temperature; α_T - the linear expansion factor of hard alloy of the tool tip; β' designates the theoretical ideal value of β . The approximate relation of β' and relative increase at austenite decomposition is $\delta V \approx 3\beta'$, and the relative expansion is determined by

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